

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/777,468  
Page : 6

### REMARKS

In the Advisory Action of February 21, 2008 the Examiner indicates, and the Applicant acknowledges, that claims 1-6, 17, 18, 23 and 24 are currently pending. The Applicant wishes to express appreciation for the timeliness of the Official Office Action.

The Examiner has maintained previously rejected claims 1-4, 6 and 18 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,254,259, to Kobayashi. The Applicant respectfully submits that Kobayashi does not teach, suggest or imply an automatic vehicle exterior light control system, comprising: a controller configured to effect automatic operation as a function of an ambient light value, wherein said ambient light value is a weighted average of a plurality of ambient light level readings acquired from a photo transducer, said controller is further configured to generate an exterior light control signal as a function of the presents of an atmospheric condition of interest, wherein said controller is further configured to distinguish between reflections off of a highly reflective surface and reflections off of atmospheric conditions of interest, wherein an exterior light control output of said controller is in a first state when reflections off of a highly reflective surface are detected and said exterior light control output is in a second state when reflections off of atmospheric conditions of interest are detected as recited in claim 1. In that claims 2-4 and 6 depend from claim 1, the Applicant respectfully submits that claims 1-4 and 6 are in condition for allowance over Kobayashi.

The Applicant further submits that Kobayashi does not teach, suggest or imply an automatic vehicle exterior light control system, comprising: a controller configured to effect automatic operation as a function of an ambient light value, wherein said ambient

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/777,468  
Page : 7

light value is a weighted average of a plurality of ambient light level readings acquired from a photo transducer, said controller is further configured to identify the source of a reflection in an image by employing at least one of the parameters selected from the group comprising: mean grayscale value of at least a portion of at least one image, total grayscale value of at least a portion of at least one image, average grayscale value of at least a portion of at least one image, slope of pixel column location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, slope of pixel row location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, intercept of pixel column location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, slope of pixel row location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, a coefficient of determination, parabolic fit of at least a portion of column pixel value averages in at least one image, multiple images of differing exposure times, inputs from vehicle pitch sensors, a low-pass filter applied to at least a portion of an image, gradual vertical cutoff in at least a portion of pixel rows within at least one image, row average grayscale value net increase moving downward in at least one image, white-to-red ratio of at least one pixel in at least one white image and at least one pixel in at least one red spectral filtered image, sum of average grayscale values for at least one row in at least one image, increase brightness of controlled vehicle's exterior light and detect increase in reflection, at least one probability function, and at least one neural network, wherein a state of an exterior light control output of said controller is at least partially dependent upon the source of said

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/777,468  
Page : 8

reflection in said image as recited in claim 17. In that claim 18 depends from claim 17, the Applicant respectfully submits that claim 18 is in condition for allowance over Kobayashi.

Yet further, the Examiner has maintain rejected claims 5 and 17 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,254,259, to Kobayashi in view of NPL document titled: "A Recurrent Neural Network Classifier for Improved Retrievals of Arial Extent of Snow Cover", to Simpson et al. For at least the reasons expressed above with respect to independent claim 1 and in that claim 5 depends from claim 1, the Applicant respectfully submits that claim 5 is in condition for allowance over Kobayashi and Simpson et al.

The Applicant further submits that Kobayashi, Simpson et al. or the combination thereof does not teach, suggest or imply an automatic vehicle exterior light control system, comprising: a controller configured to effect automatic operation as a function of an ambient light value, wherein said ambient light value is a weighted average of a plurality of ambient light level readings acquired from a photo transducer, said controller is further configured to identify the source of a reflection in an image by employing at least one of the parameters selected from the group comprising: mean grayscale value of at least a portion of at least one image, total grayscale value of at least a portion of at least one image, average grayscale value of at least a portion of at least one image, slope of pixel column location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, slope of pixel row location versus pixel grayscale value of at least a portion of a column of pixels within at least one image,

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/777,468  
Page : 9

intercept of pixel column location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, slope of pixel row location versus pixel grayscale value of at least a portion of a column of pixels within at least one image, a coefficient of determination, parabolic fit of at least a portion of column pixel value averages in at least one image, multiple images of differing exposure times, inputs from vehicle pitch sensors, a low-pass filter applied to at least a portion of an image, gradual vertical cutoff in at least a portion of pixel rows within at least one image, row average grayscale value net increase moving downward in at least one image, white-to-red ratio of at least one pixel in at least one white image and at least one pixel in at least one red spectral filtered image, sum of average grayscale values for at least one row in at least one image, increase brightness of controlled vehicle's exterior light and detect increase in reflection, at least one probability function, and at least one neural network, wherein a state of an exterior light control output of said controller is at least partially dependent upon the source of said reflection in said image as recited in claim 17. The Applicant respectfully submits that claim 17 is in condition for allowance over Kobayashi and Simpson et al.

Even further the Examiner has maintained rejected claims 23-24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,254,259, to Kobayashi in view of U.S. Patent 5,963,148, to Sekine et al. The Applicant respectfully submits that Kobayashi, Sekine et al. or a combination thereof does not teach, suggest or render obvious an automatic vehicle exterior light control system, comprising: a controller configured to detect at least one of a pedestrian and a bicyclist and further configured to provide a

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/777,468  
Page : 10

corresponding indication to an operator of a controlled vehicle, wherein a state of an exterior light control output of said controller is at least partially dependent upon detection of either a pedestrian or a bicyclist as recited in claim 23. In that claim 24 depends from claim 23, the Applicant respectfully submits that claims 23 and 24 are in condition for allowance over Kobayashi and Sekine et al.

In view of the foregoing remarks, the Applicant submits that the present invention as defined in claims 1-6, 17, 18, 23 and 24 is in condition for allowance over the art of record. The Applicant, therefore, requests that the Examiner issue a notice of allowance. Please contact the undersigned should additional information be required.

Respectfully submitted,  
JOSEPH S. STAM ET AL.  
By: Gentex Corporation

Jul 28, 2008  
Date

James E. Shultz Jr.  
James E. Shultz Jr.  
Registration No. 50,511  
600 N. Centennial Street  
Zeeland, Michigan 49464  
616/772-1800